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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,653	10/15/2003	Chuan-Pei Yu	AUOP0022USA	2652
27765	7590	02/24/2005	EXAMINER	
NORTH AMERICA INTERNATIONAL PATENT OFFICE (NAIPC)			HAN, JASON	
P.O. BOX 506			ART UNIT	
MERRIFIELD, VA 22116			PAPER NUMBER	
			2875	

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/605,653	YU ET AL.	
	Examiner	Art Unit	
	Jason M Han	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 4,7,8 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,9 and 11-16 is/are rejected.
- 7) ☒ Claim(s) 11,15 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>8/31/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The disclosure is objected to because of the following informalities:
 - a. Page 7, Line 2, Paragraph 19: Typographical error – “bya” should read as “by a”;
 - b. Page 8, Line 11, Paragraph 21: Typographical error – “68are” should read as “68 are”;

Appropriate correction is required.

Claim Objections

3. Claim 11 is objected to because of the following informalities: Grammatical error – “for uniform the light”. Appropriate correction is required.
4. Claim 15 is objected to because of the following informalities: Grammatical error – “the same patterns” should read as “the same pattern”. Appropriate correction is required.
5. Claim 16 is objected to because of the following informalities: Grammatical error – “are the different patterns”. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 5-6, 9, and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Pelka et al. (U.S. Patent 6134092).
7. With regards to Claim 1, Pelka discloses an illumination device including:
 - A plurality of point light source generators [Figure 2: (50)];
 - A diffusing plate [Figures 12: (44, 46, 56)] installed on the plurality of point light source generators for scattering the light generated by the plurality of point light source generators; and
 - A plurality of scattering apertures [Figures 3-4: (70)] installed on the surface of the diffusing plate opposite to the plurality of point light source generators, wherein a scattering pattern [Figures 3-4: (65)] is disposed over the inner wall of at least one scattering aperture [Column 4, Lines 37-54];
 - A diffusing sheet [Figure 12: (110)] installed above the diffusing plate for diffusing the light emitted from the diffusing plate.
8. With regards to Claim 2, Pelka discloses the point light source generators being light emitting diodes (LEDs) [Column 3, Lines 17-22].
9. With regards to Claim 3, Pelka discloses the diffusing plate including a plurality of scattering particles to uniform the light generated by the point light source generators [Column 4, Lines 37-54].
10. With regards to Claim 5, Pelka discloses the number of scattering apertures [Figures 3-4: (70, 71)] corresponding to the number of point light source generators

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[Figures 3-4: (50)], whereby the position of each scattering aperture corresponds to the position of each point light source generator.

11. With regards to Claim 6, Pelka discloses the plurality of scattering apertures being trapezoidal in shape [Figure 3: (70)].

12. With regards to Claim 9, Pelka discloses the plurality of scattering patterns including a plurality of V-trenches [Column 7, Lines 44-61].

13. With regards to Claim 11, Pelka discloses at least one prism sheet [Figure 12: (108); Column 8, Line 3] installed above the diffusing sheet to uniform the light diffused by the diffusing sheet.

14. With regards to Claim 12, Pelka discloses the illumination device further including at least one brightness enhancement film [Figure 12: (108); Column 8, Lines 4-7] installed above the diffusing plate for enhancing the brightness of the backlight module.

15. With regards to Claim 14, Pelka discloses a scattering pattern being installed on the inner wall of each scattering aperture [Figure 3: (65); Column 4, Lines 37-54].

16. With regards to Claim 15, Pelka discloses the scattering patterns disposed over the inner walls are the same pattern [Figures 3-4: (65); Column 4, Lines 37-54].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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17. Claims 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pelka et al. (U.S. Patent 6134092) as applied to Claim 1 above, and further in view of Miyazaki (U.S. Patent 6065845).

With regards to Claim 13, Pelka discloses the claimed invention as cited above. In addition, Pelka teaches a heat sink made of copper [Figures 10-12: (42, 96); Column 6, Lines 19-29] that is installed under the plurality of point light source generators, but does not specifically teach the heat sink serving as a reflecting plate.

Miyazaki teaches a lighting device including a reflecting plate [Figures 1-3: (19)] disposed under a plurality of point light source generators [Figures 1-3: (18)].

It would have been obvious to modify the illumination device of Pelka to incorporate the reflecting plate of Miyazaki in order to provide a more efficient illumination, whereby the reflecting plate helps to prevent a loss of light within the device.

18. With regards to Claim 16, Pelka in view of Miyazaki discloses the claimed invention as cited above. In addition, it is obvious of Pelka that one could apply different patterns over the inner walls to produce a different scattering/reflecting effect on the illumination [Column 4, Lines 37-43].

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art pertinent to the current application, but are not considered exhaustive:

US Patent 5070431 to Kitazawa et al;

US Patent 5477422 to Hooker et al;

US Patent 6007209 to Pelka;

US Patent 6008871 to Okumura;

US Patent 6419372 to Shaw et al;

US Patent 6601962 to Ehara et al;

US Patent 6666569 to Obata;

US Patent 6697042 to Cohen et al;

US Publication 2004/0105247 to Calvin et al;

US Patent 6789921 to Deloy et al;


US Patent 6805468 to Itoh et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M Han whose telephone number is (571) 272-2207. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMH (2/7/2005)


JOHN ANTHONY WARD
PRIMARY EXAMINER